

REMARKS

Applicant is extremely appreciative of the assistance and comments provided by Examiner Shay in the Personal Interview between Examiner David Shay and Richard Cates on February 10, 2009.

By this Amendment, claims 21, 38, and 55 have been amended. Claim 56 has been cancelled. New claim 69 has been added. No new matter is added by the claim amendments and/or new claim.

Claims 21, 38, and 55 have each been amended to more clearly define the invention claimed, including clarifying that the absorbing material is prevented from contacting the target (e.g., skin). Support for these limitations are found throughout the Specification, including at p. 18, lines 17-20; p. 54, line 27 to p. 55, line 2; p. 58, lines 9-11; p. 59, lines 26-30; p. 63, lines 27-30; and p. 79, lines 20-26 of the specification as originally filed.

Claims 21 and 38 have also been amended to recite that the tissue modification includes pore expansion which occurs without tissue removal. Support for this limitation is found throughout the application as originally filed, which includes numerous reference to the invention used to “remove or modify” and for “removing or modifying” target material (See, e.g., p. 49, lines 13-18; p. 50, line 27 to p. 51, line 2; pp. 76-77; etc. of original specification [emphasis added]). Accordingly, the invention includes tissue modification without tissue removal. Moreover, the general embodiment recited in the currently pending claims, e.g., wherein the absorbing material is prevented from contacting the target material, is specifically recited as being for use in “removing or modifying a [target] material.” See, e.g., p. 76, line 27 to p. 77, line 1; p. 79, lines 2-7; and p. 79, lines 20-26 (aka so-called “claims” 1, 23, and 26) of the specification as originally filed.

Claim 55 has been further amended to refer to the intermediate material blocking and/or absorbing emitted energy directed at the intermediate material, and also to include the limitations previously included in its dependent claim 56. Claim 56 has been cancelled. New claim 69 has been added, which depends from claim 55 and includes the additional limitation that the solid layer comprises a metal layer. Support for new claim 69 is present in various portions of the application, including at p. 58, lines 1-8 of the originally-filed specification, which describe a metal layer in the form of a foil comprising steel, aluminum, copper, gold, or other metals.

Comments on the Eppstein reference:

U.S. Patent No. 6,685,699 to Eppstein discloses an absorbing material configured to be placed against the skin, with the absorbing material configured to absorb energy from an energy source, transforming the energy into thermal energy, and passing the thermal energy on to an underlying layer of skin in order to ablate the skin. Eppstein is quite different from the invention currently claimed, as discussed below.

a. Skin Ablation v. Pore Expansion:

All pending claims of the current invention recite methods and/or devices for pore expansion. By contrast, in all embodiments of Eppstein, the underlying skin is ablated. See Eppstein, e.g., col. 1, lines 35 – 56; col. 3, lines 35-42; col. 4, lines 6-18. Thus, Eppstein addresses tissue removal, and not pore expansion. Tissue removal will not inherently cause pore expansion. The teachings of Eppstein are thus in contrast to the current claims, which specifically recite that the pores are expanded.

Moreover, independent claims 21 and 38 as amended specifically recite that the pores are expanded without tissue removal. Accordingly, the current claims are believed allowable over Eppstein's teaching of tissue ablation.

b. Energy Absorbing Material – Contact v. Non-Contact with Skin:

All currently pending claims as amended recite the presence of a solid film or other solid layer of material configured to prevent any portion of the absorbing material from contacting the skin or other target material.

In contrast to the currently claimed invention, Eppstein teaches that the energy absorbing material is in direct contact with the skin. For example, Eppstein describes the use of an “energy absorbent film 25” for placement in direct contact with the skin (Eppstein, col. 3, line 44; col. 4, lines 2-5.) In an alternate embodiment, “. . . a clear film 25 with an absorbent adhesive layer” can be used, with the absorbent adhesive applied directly to the skin. (Eppstein, col. 3, lines 55-58.) Note that in the alternative embodiment, the film is clear and the adhesive is absorbent. Thus, all embodiments of Eppstein teach that the energy absorbent layer (whether an absorbent film or an absorbent adhesive) is in direct contact with the skin.

Eppstein specifically discusses the importance of providing direct contact between the absorbing substance and the skin:

“The film 25 flexes to provide good physical contact with the underlying tissue 5 which is desirable to achieve efficient transfer of heat to the tissue when the energy absorbent film layer 25 is heated.” (Eppstein, col. 4, lines 2-5.)

Eppstein thus teaches away from the current invention wherein the absorbing material is prevented from direct contact with the skin.

Moreover, the solid layer recited in the current claims would prevent Eppstein from working in its intended manner. An important feature of Eppstein is that the energy absorbent layer splits/separates after some time in order to expose the underlying tissue. The solid layer of the current invention claims would interfere with such separation of the energy absorbent layer by holding the energy absorbent layer together. This is particularly true for new claim 69, which recites the layer as comprising a metal layer.

In view of the above, Eppstein does not teach or suggest the current invention's use of a solid film or other solid layer of material configured to prevent any portion of the absorbing material from contacting the skin or other target material.


CONCLUSION

Applicant is particularly appreciative of the Examiner's efforts in reviewing this application and in the recent personal interview.

In view of the foregoing, it is submitted that all pending claims are now in condition for allowance. Hence an indication of allowability is hereby requested. If direct communication with Applicants' attorney would serve to advance prosecution of this case, the Examiner is cordially requested to call the undersigned attorney at the below-listed telephone number.

Respectfully submitted,

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